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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/653,052	09/01/2000	Peter S. MacLeod	07844-356001	5508
21876	7590	12/28/2005	EXAMINER	
FISH & RICHARDSON P.C. P.O. Box 1022 MINNEAPOLIS, MN 55440-1022			NGUYEN, MADELEINE ANH VINH	
			ART UNIT	PAPER NUMBER
			2626	

DATE MAILED: 12/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/653,052

Applicant(s)

MACLEOD, PETER S.

Examiner

Madeleine AV Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-21 and 25-30 is/are allowed.
- 6) ☒ Claim(s) 22-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
- Paper No(s)/Mail Date 7/5/05 *av*

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 12, 2005 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Balonon-Rosen et al (US Patent No. 6,307,961) in view of Balasubramanian et al (US Patent No. 6,744,534).

Concerning claim 24, Balonon-Rosen discloses an apparatus for transforming data from a source device color space to a destination device color space, wherein the source device is associated with a source device profile and the destination device is associated with a destination device color profile comprising means for transforming data from the source device color space to an intermediary color space (independent color space) using the source device color profile, a

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source rendering intent (source rendering technique or means), and the profile connection space, a destination rendering intent (destination rendering technique or means), and the destination device color profile (Fig.1-2; Abstract; col. 1, line 67 – col. 3, line 8; col. 4, line 65 – col. 5, line 21; col. 8, line 7 – col. 8, line 45).

It is noted that the source rendering intent is for rendering an input image to a rendered image in the first image rendering device and the destination rendering intent is for rendering an output image to a rendered output image in the second image rendering device (Fig.2) based on the teaching in the Background of the present application (pages 4-8).

Balonen-Rosen does not directly teach the intermediary color space profile. However, Balonen-Rosen teaches in the Background of the Invention that “The ICC defines five major classes of color profile: device profile, device-link profile, color space conversion profile, abstract profile and named color profile. The ICC profile is a tagged file structure which includes three main sections: a header, a tag table and tagged element data... Among the most essential fields found in a device profile’s header is the profile connection space (PCS) field which indicates which device-independent units are used within tags which are utilized by the CMS when deriving parameters for its color transform model.” (col. 2, lines 18-31). In addition, “A device profile’s tags describe the relationship between device digits and the device-independent units of the profile’s PCS.” (col. 2, lines 44-46). It would have been obvious to one skilled in the art at the time the invention was made to consider the profile connection space (PCS) taught in Balonen-Rosen equivalent to the intermediary color profile since it is the profile of the independent color space for wherein the transformation of data from the source device

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color space to the independent color space is performed and the transformation of data from the independent color space to destination color space is performed.

Balonon-Rosen fails to teach that the source rendering intent and the destination rendering intent determine a method of mapping colors from the source device color space to the destination device color space. From the same field of endeavor, Balasubramanian et al teaches that the mapping of a color image is based on a rendering intent. For instance, Balasubramanian et al teaches means for mapping a pixel in the first sub-gamut of the first color gamut under a source rendering intent through a first transform to a pixel within the first sub-gamut of the second color gamut, mapping a pixel in the second sub-gamut of the first color gamut under a second rendering intent through a second transform to a pixel in the second sub-gamut of the second gamut, and mapping a pixel located between the first sub-gamut and the second sub-gamut of the first color gamut via a blend of the first transform and the second transform wherein the blend is based on the location of the pixel, whereby the closer the pixel is to the first sub-gamut of the first color gamut, the stronger the influence of the first rendering intent is on the mapping method and the closer the pixel is to the second sub-gamut of the first color gamut the stronger the influence of the second rendering intent is on the mapping method, thereby beneficially combining the effects of multiple rendering intents in the rendering of the image (Abstract; col. 4, lines 1-21; col. 11, lines 6-67; col. 12, lines 53-61; col. 13, lines 1-48). It would have been obvious to one skilled in the art at the time the invention was made to combine the above teaching of Balasubramanian to the system in Balonon-Rosen since Balonon-Rosen also teach the use of rendering technique or means for mapping color image. (col. 5, lines 47-63; col. 8, lines 26-45).

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Claim 22 is method claims of apparatus claim 24. Claim 22 is rejected for the same rationales set forth for claim 24.

Concerning claim 23, Balonon-Rosen in view of Balasubramanian discloses a computer program product, tangibly embodied in a computer readable medium comprising instructions operable to cause a processor to perform the step as discuss in claim 22.

Allowable Subject Matter

4. Claims 1-21, 25-30 are allowed.

The following is an examiner's statement of reasons for allowance: Claims 1-21, 25-30 are allowable over the prior art of record because the Examiner found neither prior art cited in its entirety, nor based on the prior art, found any motivation to combine any of the said prior art which teaches an apparatus or a method or a computer program product tangibly embodied in a computer readable medium for transforming data from a source device color space to a destination device color space comprising means for or step of transforming data from the source device color space to an intermediary color space such that the source rendering intent determines a method of mapping colors from the source device color space to the intermediary color space; and transforming the intermediary data from the intermediary color space to the destination device color space such that the destination rendering intent determines a method of mapping colors from the intermediary device color space to the destination device color space.

Conclusion

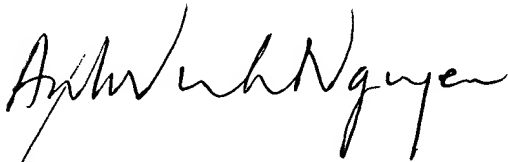
5. Claims 22-24 are rejected, claims 1-21, 25-30 are allowed.

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Madeleine AV Nguyen whose telephone number is 571 272-7466. The examiner can normally be reached on Monday, Tuesday, Thursday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly A. Williams can be reached on 571 272-7471. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Madeleine AV Nguyen
Primary Examiner
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December 23, 2005